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AUTHOR Hickey, Tom
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ABSTRACT

The project investigated the effectiveness of an evironmental therapy training program for geriatric mental health workers when used in two different institutional settings. Site A was a State-operated facility for psychiatric in-patient care, accommodating 2,000 patients, with emphasis on maintenance and general patient welfare. Site B, a former State-operated custodial care facility with 100 beds, placed emphasis on diagnosis and assessment for subsequent placement in nursing/boarding residences and patients' homes. Thirty trainees at each institution were selected non-randomly by the institutional directors for the training program promoting patient independence. The first training phase consisted of the presentation of environmental therapy principles in 18 two-hour sessions (lecture, discussion, role playing, audiovisual materials, and small group problem-solving sessions). Two pre- and post-measures, a Negative Attitude Toward Old Age Score and an Assessment of Hospital Score, were used at both institutions. The results of pre/post comparison on the Assessment of Hospital Score showed significant differences, demonstrating the effectiveness of the training program in changing trainees' assessments of direct patient care and of their hospital environment in general. The principles of milieu therapy appear to be sufficiently useful to institutional geriatric service providers to warrant continued dissemination. (EA)

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Institute for the Study of Human Development

The Pennsylvania State University
College of Human Development
University Park, Pa. 16802

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GERIATRIC STAFF TRAINING FOR PATIENT INDEPENDENCE

Tom Hickey

NUMBER IV IN A SERIES

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TOPICAL PAPERS: SERIES I
EDUCATIONAL PROGRAMMING
and
COMMUNITY RESEARCH IN GERONTOLOGY

Edited by Tom Hickey

GERIATRIC STAFF TRAINING FOR PATIENT INDEPENDENCE*

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Topical Papers: Series I
Educational Programming and Community
Research in Gerontology

Edited by Tom Hickey

Gerontology Center
Amy Gardner House
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Preface

This publication has enabled the Gerontology Center to combine the objectives of two major goals; the development and dissemination of educational materials concerning aging and older persons, and the writing and publication of professional papers by Center staff members.

It is our sincere hope that this series will serve as a useful resource for continuing educators, program planners, practitioners and all others interested in learning more about gerontology.

Papers are available through the Gerontology Center, Amy Gardner House, Pennsylvania State University, University Park, Pennsylvania 16802.

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Tom Hickey & Karen Szabo

The emerging predominance in the human services system of an emphasis on maximizing the independence of older Americans requires little documentation. De-institutionalization processes began to evolve on a widespread basis in the 1960's in hospitals and other custodial care facilities for older adults, leading to a progression of treatment models--therapeutic communities, half-way houses, alternatives to institutionalized care, and others. The White House Conference on Aging in 1971, and many publications since then, have emphasized both our progress in postponing in the life span illnesses leading to institutionalization, as well as the need to continue to provide supportive rather than maintenance services. For the most part, the social programs and community health services for the elderly which have found the greatest degree of success have capitalized on the goal of developing and maintaining a sense of personal choice regarding life style and how one meets his own needs.

Based on the assumption that fostering independence in old age is a desirable goal, this project was focused on manpower training in the gerontological service delivery system--training which would provide attitudinal, informational, and skill bases for promoting the independence, self-respect, and satisfaction of the service recipient. This paper deals specifically with a comparison between and within training groups on attitudes and work satisfaction dimensions related to participation of institutional personnel in a training program based on the previous assumption. This paper builds upon an earlier phase (Hickey, in press) where a saturation training model and its assessment were reported.

CONCEPTUAL FRAMEWORK

Since this paper is focused on the effectiveness of training, there is little need to provide a rationale for the assumption regarding personal

independence. At the same time, the orientation of this project is not one of adult education, where the theoretical focus would be on the participants as adult learners. The conceptual strategy here is to develop a more precise understanding of the concepts and dynamics required in the training intervention to operationalize the assumption of patient independence as desirable, so that it becomes a measurable training objective.

It should be fairly apparent that any discussion of patient independence in an institutional setting is related to, if not an integral part of the large body of literature which focuses on milieu or environmental therapy. The concepts of this literature which relate to the training intervention of the project are discussed here. However, the actual development of milieu therapy concepts and practices need not be repeated since there are numerous comprehensive summaries in the literature (Greenblatt, York, & Brown, 1955; Jones, 1956; Rossi & Filstead, 1973.) Extensive descriptions of programs and rationales for program interventions based on this concept are also readily available in the literature (Cumming & Cumming, 1963; Jones, 1953; Rossi & Filstead, 1973).

A logical theoretical starting point is to be found in the perspective which views the individual as a dynamic organization of interpersonal relations within a specific social context as contributing towards personal development and maintenance. This view emerges from the early work of Harry Stack Sullivan (1931 a, 1931 b). The 20-year period following Sullivan's peak research and practice years saw the concerns of psychiatry and psychology merge with sociology and anthropology and social psychiatry, with a perspective and emphasis on <u>behavior-in-context</u> (Lewin, 1955; Mead, 1947; Parsons, 1952; Opler, 1956). Sullivan seems to have pioneered the importance of the context in which an individual operated as an integral

part of his therapeutic process. It could be said, however, that Sullivan's focus was on the patient within a context; whereas the subsequent emphasis of Jones and others was on the patient and the context. In either perspective, an important aspect in seeing the environment as directly pertaining to therapeutic outcome is the nature of the ego itself. Sullivan's stress (1947) on the dynamic, contextually-involved ego provided a base for Cumming and Cumming (1963) to build their description of the nature of the context as it affects ego processes.

Cumming and Cumming asserted that a damaged ego can be strengthened and rebuilt by appropriate use of the entire physical and social environment as a facilitator of, and source of reward for desired behaviors; and as a dynamic set of potential interactions with the patient, which encourage him to define roles for himself and to experiment with his own capacities. The damaged ego is thus resocialized and refortified in this effort by presenting various opportunities of increasing difficulty, to allow for continual reinforcement without threatening demands. Underlying the use of these techniques is a definition of the patient as an ego responsive and capable of self-direction. Initially, this personal responsibility may appear and manifest itself only at the simplest levels of functioning; given proper encouragement, mastery of broader areas of life and self-management will be attained on a gradually increasing frequency.

Specific therapeutic goals would include the following: providing the patient with distortion-free, reality-based experiences; facilitating relevant communications with others; reducing anxiety in most daily activities while simultaneously increasing self-esteem, security, and comfort; providing rational insights into, and helpful etiologies of mental illness; organizing motivations and incentives for goal attainment; and, providing

opportunities and incentives for creative and productive self-fulfillment (Schwartz, 1957). The components of such a supportive environment then, encompass the entire context in which the patient lives. In addition to special therapeutic activities and traditional medical care dimensions, this includes the structure and organization of the entire setting--in particular, staff organization and staff-patient relations, patient-patient relations, the physical setting, attitudes of both patients and staff, and even the relationship maintained and fostered by the patients (and the institution) with the outside world.

MILIEU THERAPY EVALUATION

This theoretical framework aroused tremendous enthusiasm among social scientists and practitioners in the mental health area. Obviously there are practical difficulties inherent in reorganizing hospital structures and these have been documented and discussed widely (Baganz, 1953; Devereaux, 1949; Henry, 1954; Middleton, 1953; Stanton, 1954; Stanton & Schwartz, 1954). Nevertheless, the principles of milieu therapy appear to be widely accepted at present. At the same time satisfactory evaluative studies are lacking. The two earliest appear to be Hamburg (1957), who tried to arrive at an evaluation of milieu therapy effects on both staff and patients after a two year interval, using several relatively objective indices such as staff-rated improvement in patients, decrease in patient crises, personnel attitudes and turnover, and patient improvement and transfer statistics. All indices gave positive results but there was no possibility of comparing this therapy with any other, nor were there controls. Briggs and Stearns (1957); Greenblatt, York, and Brown (1955); Rees and Glatt (1955); Tarnower (1953); Wilmer (1956), all report positive results. Kramer (1957) emphasized the need for follow-up data on discharged patients for the evaluation of long-range goals of therapy

programs, but such studies remain scarce. Similarly, milieu therapy with geriatric patients (Gottesman 1965, 1967) again report definite increases in morale of both staff and patients and reduction in psychotic symptoms as a result of the program. However, long-range effects in discharge and recidivism rates and even institutional behavior remain to be satisfactorily evaluated. Data from an earlier phase of this project is correlational at best (Hickey, in press).

In summary, reports of the numerous milieu therapy pro[illegible] have been undertaken are consistently positive and there seems little question that the programs generally produce changes which are consonant with their stated goals. What remains very much in question is the comparative effectiveness of milieu therapy relevant to other techniques, its generalizability to various kinds of patient populations, the long-range stability of its effects, and the weight to be assigned to the ever-present placebo effect.

TRAINING: THE MICHIGAN PROGRAM

A logical outgrowth of milieu therapy research has been some form of therapeutic communities for specific demonstrations of these milieu principles (Rossi and Filstead, 1973). The next step, it seems, would be to generalize these activities in order to teach others how to design and operationalize a similarly effective ward. At a demonstration site in the Ypsilanti State Hospital, gerontologists from the University of Michigan did exactly that following several years of milieu therapy research. Programmed training materials were developed for purchase by other institutions and individuals; while short training programs continued to be offered at the Ypsilanti site to interested professional applicants (Coons, 1972).

Although all components of the milieu are discussed in this program, the emphasis is on staff behavior and attitudes. In brief, the program proposes the kind of behaviors that are considered consonant with and productive of a therapeutic milieu. Such behaviors take into account the patient's individual needs and desires, and evidence that he is seen as a unique person with particular strivings. In other words, a personalizing milieu is considered to be promoted by personal interactions, a depersonalizing milieu by impersonal interactions. The goal of milieu therapy--the resocialization of damaged egos--is thus facilitated by the development of a personalizing milieu.

Although this program is well organized and is accompanied by excellent audio-visual materials, it has not yet had widespread use of evaluation. Therefore, its effectiveness for conveying milieu therapy principles is unknown. Further, its utility for staff working with differing patient populations remains uncertain as does the possible differential effectiveness of the program for different occupational levels or types.

These last questions are important ones. In recent years, the differential utility of therapeutic techniques has been questioned, and articles have appeared to challenge the generalizability of milieu therapy--especially questioning it's applicability to seriously impaired, chronically-ill patients. Gynther and Gall (1964), for example, note the ambiguity surrounding the concept of "experimental role," and suggest that certain patient types are inappropriate for these therapeutic techniques. Zeitlyn (1967) raises the question of the need for several therapies for differing patient populations. He points out that neglect (which is frequently seen as a primary characteristic of custodial care environments), and individual dignity and independence (as espoused by milieu therapy principles) on the other hand, are too

dichotomous and too extreme to be of any use or value for the severely deteriorated patient in any environment. An obvious compromise would see the adoption of milieu therapy principles as a primary mode of care in an institutional setting to provide therapeutic values for many of the patients, admitting the therapeutic limitations for the most severely dysfunctional. The most therapeutic value here is to be found in the effect on the staff member of adopting a positive and future-oriented therapeutic policy. However, even this position would meet with some strong objections--especially from more recent activities at Ypsilanti, where a "Live With Dignity" project produced remarkable gains in less than one year among severely deteriorated patients. Therefore, the question of therapeutic value vis a vis different patient populations is not easily resolved.

Since geriatric institutional populations typically suffer convergent and progressive multiple impairments, an assumption of the comparative effectiveness of this technique for such populations is particularly unwarranted. Rather, it remains to be demonstrated effectively. However, it should be clear from the previous discussion that an evaluation of the long range effectiveness of a milieu therapy program would involve assessments of patient-improvement over a much longer period of time.

TRAINING: THE PENNSYLVANIA PROGRAM

This project attempted to investigate the generalizability of a specific training program representing the environmental therapy viewpoint when used in different institutional settings. Therefore, the relative effectiveness of a specific training program with staff and patient populations which differ, was the objective here, without resolving the question of the effectiveness of milieu therapy for all chronically-ill geriatric patients. The importance of patient's independence was accepted as a basic

assumption, without necessarily accepting environmental therapy programs as the only and/or comprehensive means for attaining that end. For a gerontology manpower training and development project, the most important objective was seen as the establishment of training mechanisms which would lead to patient independence. The Michigan model then was accepted as a viable demonstration of patient independence; the training program which evolved from this research and demonstration program was tested or questioned as to its relative effectiveness when transposed to a non-demonstration site.

An earlier paper (Hickey, in press) discussed this entire issue in terms of the generalizability of research and demonstration programs beyond the demonstration site itself. This phase of the manpower development project specifically limited itself to the evaluation of the Michigan training program in terms of its stated goals: to "assist those working in institutions for the aged to evaluate their own attitudes and procedures and to learn ways to provide better treatment for patients in their care" and to promote "the creation" of a therapeutic environment for disturbed persons in an institutional setting" (Coons, 1972, pp. V & IX). For this purpose, institutional geriatric settings were selected which differed widely in function, in the level of impairment of the patients, and in the average length of residence of the patients.

However, the question of generalizability of the stated training goals, could be directly addressed by assessment of experienced staff in these settings, as well as an evaluation of the training method and content as such. We utilized the baseline information in that many trainees had received other training, and many were experienced in geriatric care. Through interviews with trainees at various stages of the program, their

reactions to specific course content could be ascertained; their evaluation of the utility of specific portions of the program could be obtained in the perspective of their particular working conditions; and, their suggestions for improvement or additions in terms of their own work-role needs could be requested.

It should be made explicit that in this training program evaluation there were no comparisons of the relative skills of different aides. What was to be established was the degree of effectiveness of the training program in increasing the skills of different staff members, whatever their original performance levels may have been. Pre-training data were collected only to establish baselines for post-training comparisons; no tests of retention of content were administered during or after the training sessions, nor was there any grading or ranking of trainees.

In summary, the goals of this program were fourfold:

1. to evaluate the effectiveness of a milieu therapy training program based on the Michigan program in differential geriatric settings;
2. to assess the utility of program goals in such settings, as reflected by trainee response;
3. to assess the program materials in terms of content and methods of presentation in differential geriatric settings with different staff personnel; and,
4. to provide a baseline for follow-up at a later date to better evaluate training program effectiveness.

PROBLEMS IN EVALUATION

A brief--though rather important--digression regarding methodology seems appropriate at this point. There seems to be little question about the relative lack of sophistication of evaluative research--especially when applied to training and service programs. Evaluation connotes a value judgment, as opposed to more objective and impersonal classic research models. Moreover, the evaluation of a training program implies that the

training intervention itself "resembles" an independent variable, when it clearly is not. The traidtional researcher may throw up his hands at the ambiguities and retreat to his well-controlled laboratory. However, it seems fairly evident that the next plateau for social research will only be reached through some (albeit fledgling and hesitant) steps towards structuring evaluative research models. This section of the paper raises some of the pertinent issues and problems as they relate to the present project and to a subsequent discussion of the results.

Discussions of the nature of evaluative research (e.g. Campbell & Stanley, 1963, Fairweather 1967, Herzog 1959, Hyman, Wright & Hopkins 1962, Suchman 1967) have pointed out that the principles guiding research are uniform regardless of whether research goals are experimental or evaluative. It is the impinging practical difficulties inherent in the carrying out of evaluative research which are peculiar to it. At all stages of such research --from formulation of goals to assessment of measured results--"ideal" design is typically at odds with legitimate demands of other program goals. Especially in programs which have undertaken to provide services, participants can expect a serious effort on their behalf. Unavoidably, problems may be expected to arise which pit service goals against preferred designs. In such cases compromises must be made, although all too frequently the researcher has no chance to work out a compromise. For this reason, the most practical evaluative research design is one with built-in flexibility; such designs can compromise without loss of utility and best adapt to altered circumstances.

There are a number of ways to build in such flexibility or resilience. One is through use of multiple methods for assessing effects, a strategy which not only provides a hedge against loss of an anticipated measure or index, but can provide some reliability for alternative methods of ascertaining

certain results. Such comparisons can be a valuable byproduct when a review of the literature consistently indicates one data-collection method as too expensive in terms of time and/or money, or especially vulnerable to on-the-job interference.

Another method of retaining resilience is simply to keep abreast of activities affecting participants and institutions involved in the program being evaluated. Unexpected results or reactions may be explicable only in light of certain events or personnel changes, especially in long-term programs. Some method of assessing the overall climate surrounding program participants is useful for evaluative research which is so vulnerable to chance events.

Goals of evaluative research are primarily utilitarian, and directed toward application; as contrasted with basic research, the aims of which are predominantly refinement of knowledge. For the former then, it is particularly useful to be able to specify program outcome differences. The best evaluation is not only a statement of the general level of effectiveness of a program but a differential analysis of effectiveness: for which persons was the program most useful and why. Not only is such specification of greater value for future program modifications, but asking "why" leads to analysis by variables having greater generality; the research therefore provides basic data of wider applicability than the specific program under consideration.

In evaluative research, however, the selection of participants and controls is very likely to be subject to pragmatic considerations, aside from those of greatest utility for the research strategy. It is incumbent upon researchers assessing program outcomes to obtain sufficient information regarding program participants to make appropriate differential analyses.

Given the imperfect state of current knowledge of the relevance of many personnel characteristics, this aspect of the research represents a kind of exploratory study and can yield unexpected dividends in the explanation of differential program effects.

TRAINING PROCEDURE

The training program was conducted in two geriatric facilities. Site A was a state-operated facility for psychiatric in-patient care. This was a typical large institution comprised of numerous buildings, extensive acreage, accommodating 2,000 patients, and providing a full range of medical services. Occupying four buildings, the large geriatric population were long-term care patients originally admitted for psychiatric treatment, and who merely grew old in the institution. The programmatic emphasis in this institution was on maintenance and general patient welfare, not on rehabilitation. At the same time, low patient turnover rates provided maximum opportunities for extended staff-patient interactions.

Site B was a former state-operated custodial care facility (100 beds) which had been converted to a restoration and rehabilitation center. The primary function was that of diagnosis and assessment for subsequent placement of predominantly geriatric patients in nursing and boarding residences, and returning some individuals to their own homes. The average length of patient stay was just under six months.

The 30 trainees at each institution were selected by the institutional directors on the basis of a balance between estimated utility of the training program content and possible interference of the program with daily patient care. The selection of the samples was not random, but neither does it suffer from the biases of self-selection. Because of the arbitrary nature of the selection in regard to factors potentially interactive with training, the

samples and controls approach that independence of assignment required by an experimental design. The overall strategy can be considered to reasonably control the main effects of those invalidating factors which Campbell refer to as "history, maturation, testing, and instrumentation" (1963, p. 231). Given the nature of the institutional differences, trainees also differed. At the time the program was initiated, these differences were ascertained by means of a background profile sheet and a work-attitude questionnaire. The samples show some variation in age and education, but the most notable differences for possible program effects are the greater percentage of Site A trainees who were involved in direct patient service (nursing and therapy) and the considerably longer average length of employment at this site. The latter is a function of the recent creation of Site B and offset by the high percentage of trainees there with previous employment in related work.

The training program was based on the previously described Ypsilanti research project and their resulting training materials. Adaptations in technique and emphasis were made in the use of these materials based on the first year of this project (Hickey, in press). However, the training program for this phase was the same for both sites; as well as directed and taught by the same instructor in overlapping eight-week periods. Environmental therapy principles were presented to trainees in 18 two-hour sessions through a variety of didactic methods, including lecture, discussion, role play, audio-visual materials, small group problem-solving sessions, etc.

The measures used for assessing program effectiveness, attitude change, and work satisfaction are described in the following section.

RESEARCH STRATEGY AND RESULTS

The basic strategy for evaluation was a comparison of the same pre- and post-training measures for trainees and controls at the two participating

institutions, with mid-program data to monitor the base line controls previously mentioned. Specific course evaluation by trainees was obtained during the program and at its conclusion.

Two pre- and post-measures were used at both institutions: first, a negative attitude toward old age score; and, secondly, an assessment of hospital score. A third measure--observations of trainee-patient interactions, based on time-samples--was used only at Site B to assess the feasibility of such a measure for training program evaluation. Results of the observational measures are not included in this paper for a number of reasons. However, they do not contradict reported results.

1. NEGATIVE ATTITUDE TOWARD OLD AGE SCORE

Measure. An implicit assumption of milieu therapy is that better understanding of the patient's role and emphasis on the patient as a fellow human being will lead to more positive attitudes toward chronically ill and dependent patients. In the case of a geratric milieu therapy training program, a more positive attitude toward old age would presumably result from the training.

In order to test this assumption, a negative attitude toward old age score was derived from ten negative stereotypes about old people in general. Respondents were asked to check these on five-point Likert scales to indicate their degree of agreement or disagreement with each statement. These ten statements, originally drawn from Tuckman and Lorge's work (1953) had previously been used by Gottesman and Bourestom in their Detroit Nursing Home study and had elicited a wide range of responses. Results are not directly comparable since their analysis of the stereotypes was by percentage agreeing with given numbers, while in this study five-point scales were provided.

The weighted scores for each scale were combined into a composite score, which was used as a base line pre-measure for trainees and controls. These scores were compared by institution, demographic characteristics and various work attitude categorizations. Since sample sizes were very small and most of the scores not truly interval, nonparametric statistics (Siegel, 1956) were used throughout (e.g., Mann-Whitney U test, Behrens-Fisher Exact Probability test, and the Kruskal-Wallis One-way Analysis of Variance for tests of significance in comparisons of these samples).

Pre-test comparisons: Comparing institutions, trainees at both sites showed no significant differences nor were any demonstrated between trainees and controls. The institutional samples were combined for analysis by demographic characteristics: level of education, age, length of employment, job classification (as an index of directness of contact with patients). Ratings of job satisfaction and work contribution showed no significant relationship to negative attitudes toward old age.

Only race approached significance ($p = <.08$) with blakcs showing more agreement with the negative stereotypes. During interviews with supervisors, blacks were often referred to as more compassionate and better at handling some patients than white staff; and observations established their generally accepting and friendly attitude toward patients, though systematic comparisons by race were not made. The discrepancy here between behavior and attitude as reflected in stereotype agreement points again to the need to distinguish between the two in this type of research.

Pre-post comparisons: The scores on negative stereotype agreement (Table 1) showed no significant change at Site A, and an increase in agreement at Site B (controls showed no significant differences on this measure). The apparent explanation for this unexpected result is the difference in job

classification distribution between the two institutions, and the nature of the patient populations. At Site A, the patients are long-term, relatively disabled, and now old; and 95% of the trainees were involved in direct patient service and had been employed longer in this kind of work than their counterparts at Site B. The content of the training program insofar as it dealt with common aging problems was consonant with Site A trainees' experience. Although changes in scores occurred, (see Table 1) they did not move significantly in either direction. However, it is of interest to note that at Site B, nursing trainees and non-nursing trainees had essentially the same change scores; while at Site A the nursing trainees' scores increased (consonant with program objectives) whereas non-nursing trainees' scores decreased, perhaps illustrating the affect on trainees of their particular patient population experiences.

At Site B, a quite different set of conditions prevailed: only half the trainees were direct service personnel, they had been employed in such settings for shorter lengths of time and the patient population was mixed in terms of impairment, with rapid patient turnover throughout the facility. Course content therefore presented a more negative image than many trainees originally held (the difference between pre and post scores averaged 4.38). The post measure mean at Site B (31.94) approximates that of Site A (32.87), the changes at Site B probably representing a movement toward an appraisal more consistent with personnel in such geriatric settings.

2. ASSESSMENT OF HOSPITAL SCORE

Measure: This score was derived in the same fashion as the negative attitude scores, from a list of ten statements about the institution at which respondents worked. These statements were based on the course content of the training program, and they were so designed that extreme ratings on

each attribute represented attitudes which correlated positively or negatively with the goals of milieu therapy. These scores were the most direct evaluative data for program effectiveness (Table 2).

Since trainees varied on degree of direct service to patients, it was evident that not all statements were equally appropriate to all trainees. An item analysis was performed and two sets of scores isolated, one relating to the overall hospital environment, the other limited to direct patient treatment. All comparisons made were done for these subscores separately to maximize interactions of job classification with training.

Pre-test comparisons: Comparisons between trainees at both sites on this measure were not significant for the environment score but were significant ($p = < .03$) for the patient treatment subscore. Trainees at Site A expressed more agreement with program goals. When the comparison was limited to direct service trainees at the two institutions, the effect was even more pronounced ($p = < .01$) This is consistent with the instructor's evaluations during the first four classes and represented the only source of training program differentiation. Since in-service training had been regularly offered at Site A and was only beginning at Site B, the most probably source for this difference in trainee groups is the effect of prior training.

Within the institutions, there were no significant differences between trainees and controls on this measure; however when comparing the patient-treatment subscores of direct service staff with those of personnel not engaged in direct service, this difference approached significance. Combining scores across institutions and analyzing by demographic and work attitude characteristics, yielded no significant results.

Pre-post comparison: The results of pre-post comparison on this measure dramatically demonstrate the effectiveness of the training program

to change trainees' assessments of direct patient care and of their hospital environment in general. Using the Wilcoxon matched-pairs test for pre- and post-training scores, trainees at both institutions showed significant differences ($p = < .001$).

Consistent with the emphasis of the in-service training program and the policy of the hospital, Site A trainees all showed positive gains on this measure, the average change between pre- and post-scores being 8.75 for the general subscores, and 5.94 for the direct patient care subscores. Site B trainees showed less consistency with a few negative changes. Positive changes averaged 6.81 and 4.13 for the two subscore sets; change scores (ignoring direction) averaged 8.19 and 4.25 for the two subscore sets and approximate those at Site A.

Trainees at the two institutions initially rated their hospital environments identically (means were 16.63 and 16.06 for this subscore), the somewhat greater gains at Site A resulting in a post-means of 24.81 compared to that of 23.44 at Site B. Direct patient care was re-assessed more critically at both institutions, Site A trainees starting at a slightly more "satisfied" level (6.56 compared to Site 7.63) and showing greater changes, resulting in post means of 12.50 compared to 11.75 at Site B.

In order to ascertain the effect of initial score level on program effect, trainees were grouped by size of changes in scores between pre- and post-testing. Except for a few of the highest individual changes at Site B, there was no consistent relationship to level of initial pre-score at either institution. Therefore this common source of differential score changes is not a factor for these institutional settings.

Initial score ranges were greater at Site A (17 to 36) than at Site B (20 to 32) but the opposite was true for post training score ranges (32 to 41

at Site A compared to 19 to 43 at Site B). This difference reflects the differential impact at Site B of occupation; direct service personnel had pre- and post-score ranges of only 7 and 10 points respectively, and a more consistent response to the program than did non-service personnel.

Variability of change was primarily attributed to job classification and length of employment in hospital settings. Although numbers are too small to be more than suggestive, the combination of characteristics most likely to be associated with large changes in scores appears to be a direct service job, the number of years of such employment, and a conviction that one's work contributes a great deal to hospital goals. It is probably legitimate to interpret this as a combination of characteristics resulting in high motivation and in relatively immediate rewards for superior job performance.

On the other hand, the combination of characteristics least likely to produce large changes in scores was an administrative job, relatively short time on the job (especially in conjunction with lack of previous related employment), and a conviction that one's work contributes little or nothing to hospital goals. Presumably attributable to similar sources of motivation and perceived reward, the nursing staff at Site B showed larger changes on the general hospital assessment subscores than did non-nursing staff.

At Site B, a halo effect was demonstrated: controls showed approximately the same significant changes on the hospital assessment scores. During both mid- and post-program interviewing and observation periods, it was apparent that program content was being discussed widely and in this small hospital, and the enthusiasm engendered in some of the trainees was transmitted to other staff. At Site A, this effect was discernible only among nursing controls who worked in the same buildings with the trainees and with whom program content was often discussed.

3. CONTENT EVALUATION

The two most direct sources of information about any training program are the instructor and the trainees. The former is too often ignored as an evaluation source; yet an experienced instructor may be able to focus most perceptively on the strengths and weaknesses of course content vis-a-vis a particular group of trainees. A third source of data on training program effectiveness--especially for problem-solving and task-oriented programs--are assessments of the application of program principles over an extended period of time following the training program.

In this phase of the project, content assessment from the perspective of the trainees was gathered in two ways: from questionnaires following each topic and content area; and, from individual interviews following the training program. The instructor provided feedback in a similar fashion. A summary comparison of these assessments by training site and by staff role and level is presented here. A more detailed evaluation is pending follow-ups after appropriate time intervals to assess the degree and impact of implementation of training program principles. It is the contention of this writer that such an analysis is frequently omitted from typical training program evaluation reports; and that it provides very critical information on the value of the substance of the training program and related cost benefit factors in the planning of in-service training.

There are some preliminary indications here to suggest the value of this approach. All post-tests used in this phase of the project were administered to participants and controls in a similar program offered one year earlier at a third site (cf. Hickey, in press). The absence of differences on negative stereotypes and work assessment scores from this sample might easily imply a high rate of recidivism from supportive care and environmental

therapy goals, back to custody and maintenance. However, there is a great deal of evidence in the geriatric unit itself of functional and structural changes (made during the intervening year) consistent with the principles espoused in the training program. Therefore, the need for multiple measures over extended periods of time seems evident. Thus, final content analysis on the effectiveness of this program at Sites A and B will be made following an appropriate time interval.

The differences in patient populations and hospital goals at the two participating institutions are reflected in trainee and instructor evaluations of specific sessions. Site A trainees, having had in-service training and working with a long-term population of mentally impaired patients, found the sessions on Job Breakdown and Leaving the Hospital inappropriate, the sessions on Motivation and Communication and Involving the Patient, somewhat redundant.

Trainees at Site B, representing a wide range of job classifications, having had little or no training, and working with a rapidly shifting population of patients who differed in degree and nature of impairment, reacted with a wider distribution of evaluative ratings. In this setting, the initial three sessions were not as effective as had been anticipated, and it was not until the fourth session that the program "jelled" and responses became enthusiastic. Judging by comments of both the instructor and the trainees, this was not the result of inappropriate content but of a lack of familiarity with terminology, some confusion as to what the program was trying to accomplish and, most importantly, a lack of concrete and specific application to the trainees' varied work experiences.

The content of the fourth session, involving specific examples of staff analyses, feedback effectiveness and the like, was the turning point of the

program at Site B, and was rated the best session at both institutions. This suggests that the content of this session should be examined carefully to identify features which could in the future be included in a first session. It seemed to be the "something we can really understand and use" quality of the content that was most appreciated. Beginning with specific staff attributes to which trainees can immediately relate, particularly in a setting such as Site B, working with trainees who have had no prior exposure to the idea of their environment as therapeutic), can initiate early enthusiasm which will guarantee maintenance of interest in the subsequent sessions.

Aside from a very specific references to session content, there were fewer differences by occupation than had been anticipated. Judging primarily by the responses at Site B--where the range of job types was widest--content was seen as immediately relevant and useful by direct service staff, and they were the most concerned about implementation problems. Social service staff perceived the content relating to social roles and involvement of the patient in helping himself achieve higher levels of functioning as being directly relevant to their own placement efforts and their interest in those areas was evident.

Administrative and maintenance staff saw the program's utility largely in terms of its having given them insight into the problems faced by direct service personnel and having introduced them to a new philosophy of treatment. For these trainees particularly, the mixed occupational group proved advantageous, specific problems were discussed by experienced staff, and the scope and nature of the problems became real for all trainees. It is of interest that, although original perceptions of old age were altered, as evidenced by the changes in scores on the negative stereotypes; nursing staff perceptions on this measure moved to the same degree as those of

non-nursing staff, which was not the case at Site A.

It was very clear from the Site B training program that, when trainees are unfamiliar with any of the course concepts, more time is required for the program. Time for active participation and discussion is necessary to clarify the concepts and allow the trainees to become thoroughly familiar with the point of view being presented. Milieu therapy principles are not a collection of facts but a perspective, demanding time for assimilation. It is noteworthy that once the program "jelled" during the fourth session, active participation went up rapidly, and both they and the instructor began to complain that the sessions were too short.

At Site A, on the other hand, where much of the content was not altogether new, participation was consistent and paced throughout; sessions moved more rapidly and neither the trainees nor the instructor felt especially harassed by the time factor. Thus, it would seem that an important determinant of the amount of class time allotted for the program can be based on knowledge of trainees' prior exposure to relevant perspectives.

IMPLICATIONS: CURRICULUM DESIGN AND TRAINING METHODS

It has been demonstrated that a milieu therapy training program does sensitize trainees to the therapeutic potential of the environment in which they work. And, at least in geriatric institutions apparently the training is most effective for personnel who have been engaged in direct service to patients for some time, who not only implement the varying treatments prescribed but are in a position to assess their benefit to patients. The experienced staff members who were trainees in this project were particularly affected by the training--strong evidence of its value and relevance to their real problems and potential environment-related solutions.

However this differential response by length of direct service involvement

with patient treatment points to the inadequacy of this program content for new personnel in such settings. If new staff (or those not engaged in direct service to patients) are to be sensitized to milieu factors, they must first be made aware of patients' limitations and potentials. The design of this preliminary training could be easily based on the content assessments of each session of this program, as well as from the interviews held at the conclusion of the project. The most obvious suggestion would seem to be discussion-format and role-playing sessions wherein experienced staff can be encouraged to focus the results of their experiences, and present them vividly for those lacking a background of direct contact with patients. Other formats are also possible and the development and comparative evaluation of such initial training segments are feasible with some necessary modifications of the training program for maximum utility to a broader range of personnel.

It has been clearly demonstrated that the picture of old age presented via course content is consonant with that held by staff long experienced in institutional geriatric settings. This is an appropriate image since the material was developed explicitly from procedures which had promoted the establishment of a therapeutic environment for dysfunctional individuals in an institutional setting. However, if this program, or a modified version of it, is to be used in the training of geriatric workers functioning outside institutions, or with persons who are not seriously disturbed, then the more positive image of normal age changes should be presented to avoid the implication that disturbance or impairment are intrinsic to aging.

The pronounced halo effect of the training program at Site B has implications for training format. In settings where personnel are in close daily contact with each other, the selection of trainees from all possible

occupational levels ensures the maximum distribution of course content and impact. Selection of key high-level staff for training would not have produced this pronounced halo, since trainees discussed the program predominantly in informal groups and with work-mates. A saturation technique therefore ensures dissemination of content and stimulates interest at all occupational levels very rapidly.

In settings where trainees are limited to a few, relately close daily-contact circles (such as the geriatric buildings and wards at Site A), the effect of the program is likely to be contained only within those circles. Since this project's emphasis was on the training of workers in geriatric settings, program goals were in no way hampered by this limitation. However, were a training program of greater generality to be offered the question of selection of trainees in such large facilities should be carefully examined to achieve maximum effectiveness.

In summary, there are several important implications here for future training. First of all, the principles of milieu therapy seem to be sufficiently "marketable", or useful to institutional geriatric service providers to warrant their continued dissemination, despite conflicting theoretical views. Moreover, this project seems to place nearly equal emphasis on content and method, further substantiating what was reported in an earlier phase (Hickey, in press), regarding the value and effectiveness of a saturation or contextual training approach. Differences between and within Sites A and B participant groups here demonstrated the importance of interaction with work-mates, as well as the comingling of direct service and supportive personnel.

This latter is an important result when compared with the Michigan program. Emphasis there has been largely on the content and the demonstration unit as primary didactic modes, with trainees returning (usually alone or in

pairs) to their home-institution to be quickly re-entered into that environment, its problems and priorities. While there has been little (if any) formal evaluation of the effectiveness of that program in the trainees' work settings, there are a number of very clear indications that the principles of the training program have not been widely implemented elsewhere. The in-depth approach used here may not have had such widespread use--considering that training has really only been conducted at three institutions. However, the emphasis here on context and trainee (as opposed to content and demonstration unit) may become more valuable in the ultimate analysis.

DIRECTIONS FOR FURTHER RESEARCH

Two questions remain unanswered: Are the attitudinal changes demonstrated for this program short-term phenomena or will they persist? and, what are the behavioral effects of the training program?

The first question can only be answered by a follow-up re-test and interview at some time in the future; combined with observational assessments of environmental changes consistent with program goals. As previously stated, this type of follow-up was conducted at a third site where the program had been offered one year earlier. The two check-lists used in this study (negative stereotypes of old age and hospital assessment) were filled out by 32 former trainees and 41 controls. There were no significant differences of means between the two groups on either measure.

This result cannot be taken as a legitimate evaluation of long-range program effect for a number of reasons: only means for groups were available; there were a lack of pre-post scores for individuals; similar pre-training measures were not available for comparison; and, another program had been presented during the year by some of the hospital staff which

apparently provided similar content materia.

The only legitimate comparison that can be made is between the post-measure means of Sites A and B trainees and the mean scores from the earlier site. For the general hospital assessment subscores, the earlier group means fall between the pre- and post-measure means obtained at Sites A and B, but fall below the pre-post mid-point; on the direct patient care subscores, earlier group means are level with the lowest pre-scores, those obtained at Site A.

The program would appear to have made only a small long-range impact on attitudes expressed on the check-lists. However, lacking comparable data on the original levels, which could well have been lower than those at either Site A or Site B, this conclusion can neither be verified or rejected. Using non-comparable data, it is clear that the base line attitudes were much lower because of the structure of the hospital, staffing problems, and patient overloads.

The second unanswered question relates to the behavioral effects of the training program. Such effects could not be expected to evidence themselves quickly or dramatically in everyday behaviors on the wards--especially in institutions whose philosophy of caretaking is therapeutic, rather than merely custodial and whose staff is well trained and already functioning at a high therapeutic level. Evidence for behavioral rather than attitudinal changes can be found only after a time span which is sufficient to allow for the generation of programmatic changes, alterations in intra-staff relationships, and serious attempts to modify relevant aspects of the institutional milieu.

It is particularly important to note that, one week after the conclusion of the training program, three trainees at Site B were initiating new projects

based on principles of milieu therapy which has been presented during the program; and one proposal to begin group work not only had been vigorously championed, but had already been approved by administrators. Such enthusiastic behavior on the part of trainees represents the clearest and strongest evidence for program success even though qualitative rather than quantitative. It is also the kind of response to a program that is very much affected by specific situational parameters; and subject to attrition if discouraged or even, if not actively encouraged.

To answer both questions, long-range follow-up data is mandatory and such a study cannot be too strongly recommended. It is encouraging, therefore, to note that Site B provides a particularly good site at which to evaluate long-term effects of this training for the following reasons:

1. the fullest data, including observations, were obtained for Site B,
2. the administration is responsive to staff suggestions and in general is very cooperative,
3. relations between project personnel and Site B staff are excellent, and
4. the small size of the institution promotes ease of observation and high visibility of programmatic changes.

A follow-up of the program for at least a year following its completion would allow for a reassessment of attitudes at the end of a six month or one year interval and for a thorough chronicling of the fate of program-stimulated projects and plans.

Both kinds of data also bear directly on the question of the utility of occasional post-training "reinforcers", supportive programs, or short workshops. There is general agreement on the probable need for such supportive and redirectional programs, but no data related to who most needs them or when. A follow-up can isolate factors involved in the long-range

effects of training and the implementation of program-stimulated projects and therefore can explore the problem of bases for identification of optimum times for programmatic support and reinforcement.

SUMMARY

This project has attempted to access the effectiveness of a training program designed specifically for institutionally-based, geriatric mental health workers. The phase reported here was derived from a lengthy and well-documented history of staff-patient-environment social interaction as therapeutic; and based on two specific research and demonstration projects: the milieu therapy program in Michigan (Coons, 1972), and a one-year, pilot program focused on saturation training and contextual assessment, conducted by this author in a large state mental hospital (Hickey, in press). Although there were a number of tentative results requiring additional replications to increase reliability, there were also some clear indications of the value and merits of the underlying philosophy of the training content and objectives, and of the contextual training methods espoused here. Moreover, a good base line was provided (in one of the training sites expecially) for the necessary (and frequently missing) follow-up data from this type of project. Finally, a very satisfying and beneficial result of this project--as specified by the research staff and all participants--is that effective application of research results via appropriate training mechanisms are easily within reach of the practitioner, and the oft-desired bridge between academia and the service delivery system is truly a collaborative reality.

TABLE 1

Means and change scores of negative stereotypes of old age

	Pre-test Means	Post-test Means	Average Changes	Negative Changes
SITE A:				
Trainees (N=30)	33.07	32.87	4.20	0.33
Controls (N=30)	31.83	30.86	0.00	0.00
SITE B:				
Trainees (N=30)	36.31	31.94	4.87*	4.38*
Controls (N=30)	33.57	32.15	0.76	0.00

*p = <.05 level of significance

TABLE 2

Means and change scores on hospital assessment measures

	Pre-test Means	Post-test Means	Average Changes	Gains
SITE A:				
Trainees (N=30)	16.06	24.81	9.15	8.75*
Controls (N=30)	16.71	17.86	1.61	1.15
SITE B:				
Trainees (N=30)	16.63	23.44	7.10	6.81*
Controls (N=30)	17.17	24.15	6.91	6.98*

*$p = < .001$ level of significance

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